

PATENT COOPERATION TREATY

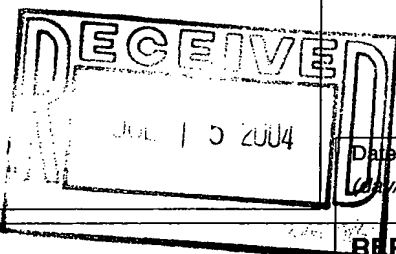
From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

CALDWELL, Stacey, E.
Molex Incorporated
2222 Wellington Court
Lisle, IL 60532
ETATS-UNIS D'AMERIQUE

PCT

WRITTEN OPINION
(PCT Rule 66)



Date of mailing
(day/month/year)

08.07.2004

Applicant's or agent's file reference
A3-072PCT

REPLY DUE

within 3 month(s)
from the above date of mailing

International application No.
PCT/US 03/31616

International filing date (day/month/year)
03.10.2003

Priority date (day/month/year)
03.10.2002

International Patent Classification (IPC) or both national classification and IPC
H01R13/635

Applicant
MOLEX INCORPORATED

1. This written opinion is the **first** drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 03.02.2005

DOCKET

Case No. : A3-072 PCT

Serial No. : _____

ITEM : Article 34 amendment

Name and mailing address of the international
preliminary examining authority:

European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

DATE DUE 10-8-04

Formalities officer (incl. extension of time limits)
Bauer, J
Telephone No. +31 70 340-3238



I. Basis of the opinion

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

Description, Pages

1-7 as originally filed

Claims, Numbers

1-16 as originally filed

Drawings, Sheets

1/7-7/7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	
Inventive step (IS)	Claims	1-16
Industrial applicability (IA)	Claims	

2. Citations and explanations**see separate sheet**

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following documents:

D1: US-A-6 129 562

D2: US-A-5 421 737

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 and 11 does not involve an inventive step in the sense of Article 33(3) PCT.

2.1 Claim 1

2.1.1 The document **D1** is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A memory card connector having an interior cavity (110) for receiving a memory card (6), comprising:

- an insulating housing (1) having a rear terminal-mounting section (11) at the rear of the cavity, and at least one longitudinal side wall section (13) extending forwardly from one end of the rear section at one side of the cavity, the housing having a bottom surface (121) for mounting on a circuit board (5), and the longitudinal side wall section having a top surface (13; see Fig. 1);
- a plurality of terminals (2) mounted on the rear terminal-mounting section (11) of the housing (1) and having contact portions for engaging contacts on the memory card;
- a metal shell (3) covering at least a portion of the insulating housing (1) and including a cover plate overlying at least portion of the longitudinal side wall section of the housing; and
- an engaging structure (33, 132, 331) including an engaging projection (33, 331) on the cover plate of the metal shell (3) extending into an engaging opening (132) in the top surface (13; Fig. 1) to prevent relative movement therebetween in a plane generally parallel to the cover plate and top surface (see col. 1

lines 55-57).

2.1.2 The subject-matter of claim 1 differs from this known memory card connector in that:

there is a slight clearance between the engaging projection and the engaging opening.

2.1.3 The problem to be solved by the present invention as defined in claim 1 may therefore be regarded as how to avoid creating residual stresses in the housing.

2.1.4 The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

- First of all, the term "slight" is subjective and as such unclear.
- Secondly, even if not explicitly mentioned therein, it is clear from D1 that because the engaging projection (33) is not press-fitted to the opening (132) but there is a partly laterally protruding tongue (331) to engage the wall of the engaging opening (132), there obviously is a "slight" clearance between the engaging projection and the engaging opening.

2.2 Claim 11

2.2.1 The reasoning of point 2.1.1 applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 11.

2.2.2 The subject-matter of claim 11 differs from the known memory card connector in that:

the engaging projection is on the top surface of the side wall section and the engaging opening is in the cover plate.

2.2.3 The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

It is generally known to the person skilled in the art that having an engagement protrusion in one part and a corresponding engagement opening in the other is an equivalent to the feature of having the

engagement opening in one part and an engagement protrusion in the other, as in document D1, and can be interchanged with that feature where circumstances make it desirable.

- 2.3 Consequently, as to independent claims 1 and 11, the requirements of Article 33(3) PCT regarding inventive step are not fulfilled.
- 3 Dependent claims 2-10 and 12-16 do not appear to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1 and D2 cited in the search report.
- 4 The invention relates to a memory card connector and consequently it is obvious that the invention has industrial applicability.